

20020111.qrp v02\_n433.qrl.20020111

Date: Fri, 11 Jan 2002 19:03:09 EST  
From: qrp-l@Lehigh.EDU  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: QRP-L digest 2433

QRP-L Digest 2433

Topics covered in this issue include:

- 1) [117379] DSW-40 For Sale  
by "Jeff Davis" <n9avg@home.com>
- 2) [117380] Re: Antenna info  
by "tmyers" <tmyers@AcademicPlanet.com>
- 3) [117381] DSW40 Sold  
by "Jeff Davis" <n9avg@home.com>
- 4) [117382] Re: Antenna info  
by "Bob Tellefsen" <n6wg@earthlink.net>
- 5) [117383] Re: New ADE mixers/tutorial  
by Roger Traylor <traylor@ece.orst.edu>
- 6) [117384] Re: Did U see this shite??  
by Caitlyn Martin <ku4qd@qsl.net>
- 7) [117385] crystal receiver at HF  
by "Stuart Rohre" <rohre@arlut.utexas.edu>
- 8) [117386] First kit for beginning ham ideas  
by "tmyers" <tmyers@AcademicPlanet.com>
- 9) [117387] Now Showing - The ARS Sojourner  
by Richard Fisher <ki6sn@yahoo.com>
- 10) [117388] Differences DSW & DSW+  
by "Pat J. Whelton" <pwhelton@hal-pc.org>
- 11) [117389] OT: ATN: OH hams  
by Dragon Singer <WM-Scace@wiu.edu>
- 12) [117390] Truffle Hunt de K8FP  
by "N8IE" <n8ie@woh.rr.com>
- 13) [117391] Re: Differences DSW & DSW+  
by "Trevor Jacobs" <fxtech@earthlink.net>
- 14) [117392] Re: 2 M Quads.. etc.  
by "ss lyon" <sslyon@megalink.net>
- 15) [117393] FOX: Got both tonight  
by "Karl F. Larsen" <k5di@zianet.com>
- 16) [117394] Re: crystal receiver at HF  
by "George, W5YR" <w5yr@att.net>
- 17) [117395] Another Good Week  
by "George, W5YR" <w5yr@att.net>
- 18) [117396] Fox -- Looks Like Halfsies Again...  
by Todd Enders <enders@bolshoi.cc.misu.nodak.edu>
- 19) [117397] crystals

by Dave Pomeroy <dave@dpomeroy.com>

20) [117398] Another cheap enclosure and cable tie  
by "K5XU, Mike Duke" <k5xu@netdoor.com>

21) [117399] Happy Dance Time!!!  
by "Trevor Jacobs" <fxtech@earthlink.net>

22) [117400] Re: crystals  
by "Gordon Cougar" <gcouger@couger.com>

23) [117401] Square wave drive in DBM's (was New ADE mixers/tutorial)  
by John Seboldt K0JD <k0jd-l@seboldt.net>

24) [117402] SW+20 question  
by "TC Dufresne" <tdufresne@neb.rr.com>

25) [117403] Re: SW+20 question  
by "Dennis Ponsness" <wb0wao@hotmail.com>

26) [117404] Fox: N6WG Prelim. Log  
by "Bob Tellefsen" <n6wg@earthlink.net>

27) [117405] Re: Did U see this shite??  
by euramcom pages <mel@euramcom.freemove.co.uk>

28) [117406] Re: Did U see this site?  
by "Dave Fifield" <dave@redhotradio.com>

29) [117407] Re: SW+20 question  
by kb1dxc <kb1dxc@discovernet.net>

30) [117408] Re: crystals  
by "John J. McDonough" <wb8rcr@arrl.net>

31) [117409] Re: Did U see this wxyz ??  
by John R Kirby <n3aaz-qrp@juno.com>

32) [117410] My e-mail (via Juno) seems to be coming OK now; how about the rest  
of you?  
by Mark Fields <mark\_ke5my@juno.com>

33) [117411] Re: [GQRP] Altoids, toabcco tins etc  
by Tim ORourke <TORourke@KaiserFT.com>

34) [117412] Re: Fox: N6WG Prelim. Log  
by Thomas Jennings <jennings@eznet.net>

35) [117413] FS: OHR500 still needs home!  
by Tim and Nancy Logan <cyr999@extremezone.com>

36) [117414] Bit Bucket Test  
by Chuck Carpenter <W5USJ@go.com>

37) [117415] NoVaQRP gathering  
by "William K. Harding" <k4ahk@ix.netcom.com>

38) [117416] Re: Did U see this site?  
by W2AGN <w2agn@pobox.com>

39) [117417] Re: OT: ATN: OH hams  
by Bruce Muscolino <w6toy@erols.com>

40) [117418] Re: Antenna info  
by cherry@getnet.net

41) [117419] Re: crystals  
by Caitlyn Martin <ku4qd@qsl.net>

42) [117420] Re: crystals  
by "Richard Brummer, K2JQ" <k2jq@bestweb.net>

- 43) [117421] Diode mixers -- example of their application, the 2N2-40  
by "John L. \"Jake\" Carter" <jakecart@ix.netcom.com>
- 44) [117422] Re: Another Mech Filter Question  
by "Brad Hernlem" <alihernlem@hotmail.com>
- 45) [117423] Murata filter specs for Epiphyte 3  
by "John\_Evans" <jaevans@codenet.net>
- 46) [117424] Re: Square wave drive in DBM's (was New ADE mixers/tutorial)  
by Roger Traylor <traylor@ece.orst.edu>
- 47) [117425] Was: ADE mixers, Now: driving mixers  
by Roger Traylor <traylor@ece.orst.edu>
- 48) [117426] Re: Identifying Oneself as QRP  
by Ron KU7Y <mswmod@bigplanet.com>
- 49) [117427] Conjugate Matching  
by Ron KU7Y <mswmod@bigplanet.com>
- 50) [117428] Re: Conjugate Matching  
by "Dave Fifield" <dave@redhotradio.com>
- 51) [117429] Re: Differences DSW & DSW+  
by Mike <mmorrow@companet.net>
- 52) [117430] Filter Solutions  
by Bruce Muscolino <w6toy@erols.com>
- 53) [117431] QRPp Subscription Status  
by Jerry Parker <jparker@fix.net>
- 54) [117432] Re: Antenna info  
by Mike <mmorrow@companet.net>
- 55) [117433] PSK on IBM Thinkpad Laptop?  
by "Harvey Mitchell" <hmitchell13@houston.rr.com>
- 56) [117434] FS: Tokyo HiPower HT-750  
by Niel Skousen <skousen@srv.net>
- 57) [117435] Re: Antenna info  
by "w2wurjj" <w2wurjj@verizon.net>
- 58) [117436] Viva el K1 con cuatro bandas! (Or, I really like my K1 with 4 bands)  
by John Harper AE5X <ae5x@qsl.net>
- 59) [117437] Re: PSK on IBM Thinkpad Laptop?  
by "George, W5YR" <w5yr@att.net>
- 60) [117438] Re: Conjugate Matching  
by cherry@getnet.net
- 61) [117439] Re: PSK on IBM Thinkpad Laptop?  
by "Karl F. Larsen" <k5di@zianet.com>
- 62) [117440] Re: QRPp Subscription Status  
by "Karl F. Larsen" <k5di@zianet.com>
- 63) [117441] Re: Conjugate Matching  
by "Karl F. Larsen" <k5di@zianet.com>
- 64) [117442] Re: QRPp Subscription Status  
by "John L. Sielke" <jsielke@pobox.com>
- 65) [117443] Re: Identifying Oneself as QRP  
by Drbob92031@aol.com
- 66) [117444] Re: Square wave drive in DBM's (was New ADE mixers/tutorial)  
by "Karl F. Larsen" <k5di@zianet.com>

- 67) [117445] Re: PSK on IBM Thinkpad Laptop?  
by "Bill Dittrich" <rwddittrich@hotmail.com>  
68) [117446] Wanted  
by w6ors@juno.com  
69) [117447] WTB: DSW20/30/80  
by "N3BJ" <alanfryer@email.msn.com>  
70) [117448] Re: SW+20 question  
by kb1dxc <kb1dxc@discovernet.net>

-----  
Date: Thu, 10 Jan 2002 19:44:37 -0500  
From: "Jeff Davis" <n9avg@home.com>  
To: <qrp-l@Lehigh.EDU>  
Subject: [117379] DSW-40 For Sale  
Message-ID: <013f01c19a39\$25ed0bf0\$9800a8c0@N9AVG>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

I have a very nice DSW40 for sale. Stock blue case but no manual. \$120 shipped CONUS.

Email me off the list for more info.

Jeff, N9AVG

-----  
Date: Thu, 10 Jan 2002 18:47:19 -0600  
From: "tmyers" <tmyers@AcademicPlanet.com>  
To: <rwddittrich@hotmail.com>,  
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [117380] Re: Antenna info  
Message-ID: <003f01c19a39\$879e5ac0\$1600a8c0@newkid>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Perhaps a vertical is in order. I saw a vertical this past week that is really neat for an antenna restricted area. The ham took a vertical and attached it to a "L" shaped base of pipe. On one end of the "L" the antenna was attached and the other end of the "L" was put into an antenna rotor. The idea here was to use the antenna rotor to raise and lower the vertical. During the day when he usually didn't operate the

antenna was down behind the fence. In the evening or when he wanted to operate, the antenna was raised to the vertical position. The guy used that to get around his deed restrictions which were quite severe. It has been working for several years.

This ham did not have some kind of limit switches on the rotor but I would think it would be a very good idea to have some.

KQ5U, Terry  
Spring, Texas

----- Original Message -----

From: Bill Dittrich <rwddittrich@hotmail.com>  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Sent: Thursday, January 10, 2002 11:18 AM  
Subject: Antenna info

> Hello all,  
> A friend of mine is considering becoming a ham but he has a BIG  
problem. He  
> can put up a 20m dipole BUT he can only get it 5 or 6 feet off the  
ground.  
> If anyone has ever had any experience with a dipole so low to the  
ground  
> (I've looked up some info, take off angle is 90 degrees, ouch) could  
you  
> email me personally as to whether it would do him any good at all for  
DX? He  
> wants to know before spending any bucks.  
>  
> 72  
> Bill D  
>  
>  
> -----  
> Get your FREE download of MSN Explorer at  
<http://explorer.msn.com/intl.asp>.  
>

-----  
Date: Thu, 10 Jan 2002 20:01:24 -0500  
From: "Jeff Davis" <n9avg@home.com>  
To: <qrp-1@Lehigh.EDU>  
Subject: [117381] DSW40 Sold  
Message-ID: <016f01c19a3b\$7e2de710\$9800a8c0@N9AVG>

MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Thanks all, the DSW-40 has been sold.

73, Jeff

-----  
Date: Thu, 10 Jan 2002 17:04:46 -0800  
From: "Bob Tellefsen" <n6wg@earthlink.net>  
To: <qrp-1@lehigh.edu>  
Subject: [117382] Re: Antenna info  
Message-ID: <MABBJOEABOILMKCJCLFCAENACPAA.n6wg@earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Bill

Your friend didn't specify why he can't get the antenna above 5 or 6 feet. If it is due to a lack of supports, there are many ways to solve that. If it is a CC&R issue, he may have to live with the low height.

Having said that, there are still things he can do on 20m to use the height he has. I would suggest a vertical, either an inverted L or a T. He will need to lay out some radials, but this will do far more for him than a very low dipole at 20m. The vertical section could be a piece of copper tubing 6 ft long, and he could use 2 or 4 evenly spaced top loading wires. Heck, if he has the horizontal space, he could phase two of them, or arrange them as a driven element and a reflector. There are lots of games he can play to exploit the space he has.

73, Bob N6WG

-----  
Date: Thu, 10 Jan 2002 17:04:29 -0800  
From: Roger Traylor <traylor@ece.orst.edu>  
To: "Paul Harden, NA5N" <na5n@rt66.com>  
Cc: qrp-1@Lehigh.EDU  
Subject: [117383] Re: New ADE mixers/tutorial  
Message-ID: <20020110170429.D20938@brilthor.ECE.ORST.EDU>  
Mime-Version: 1.0

Content-Type: text/plain; charset=us-ascii  
Content-Disposition: inline

Paul and Gang,  
You stated that....

> ..... As a diode turns on, it makes noise as the impedance is  
> changing drastically at the moment the diode turns on and current begins  
> to flow. If the LO is a sine wave, that transition period is often  
> considered to be about 20-30 degrees of the LO sine wave, and even longer  
> if your LO drive is less than recommended. But by slamming a square wave  
> into the mixer as the LO, you are turning those diodes on very quickly,  
> (a few nS, which is a few degrees for the low LO frequencies we tend to  
> use), which reduces the overall noise generated by the mixer.

The "noise" that you refer to; is it 1/f noise or some other noise source?  
I usually see that the noise figure of a mixer is essentially identical  
to its loss.

I am most concerned with the 1/f noise that Rick Campbell has noted in his  
analysis of DC receivers which are of interest to me. If square wave  
drive helps this, I would love to know. I know that square wave drive  
improves the IP3 numbers.

I personally drive diode mixers from 74AC04 inverters. I parallel two  
inverters and source terminate with a 43 ohm resistor. Following this is  
usually a attenuator to drop the drive level to +7dbm for a SBL-1 or equiv.  
The output impedance of the inverters is roughly the DC output resistance  
of the device. (Got this fact from a TI apps engineer) This value is easially  
determined with a variable resistor and power supply. I have found the AC  
series of parts to typically have an output impedance of about 14 ohms in  
either high or low state. Thus two in parallel gives an output impedance of  
7 ohms with the remainder made up with the 43 ohm resistor.

As for the output rise time, two of the inverters together into 50 ohms  
looks like about 2ns. Darn fast transssitions. The power consumption is  
much less than a class A amplifier too. Also it is very easy to accurately  
determine the drive level to the mixer. You can also make it variable just  
by adjusting the AC04's Vdd line. This may vary the output impedance a  
little bit however.

For the curious, don't try this with a 74HC04. The output impedance is much  
higher.

It is refreshing to see technical discussions here. Thanks.

Best wishes,

Roger Traylor  
WB4TPW

-----  
Date: 10 Jan 2002 15:07:31 -0500  
From: Caitlyn Martin <ku4qd@qsl.net>  
To: w6toy@erols.com  
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>  
Subject: [117384] Re: Did U see this shite??  
Message-ID: <1010693253.12135.58.camel@localhost.localdomain>  
Content-Type: text/plain  
Content-Transfer-Encoding: 7bit  
Mime-Version: 1.0

Hi, Bruce, and everyone else,

>

> Flawed or not, the ARRL can NOT change any bands. They can only make a  
> recommendation to the FCC on what changes to make. You can do the same  
> thing! Perhaps their recommendations will carry more weight because  
> they represent more members, but they do NOT have law making ability!

Bruce makes an excellent point here. One thing I have been surprised at is how few hams send comments on NPRMs to the FCC. Expressing your opinion to the league has some impact, but when it comes to rules, express yourself where and when it counts: during comment periods directly to the FCC>

72,  
Caity  
KU4QD

-----  
Date: Thu, 10 Jan 2002 19:18:32 -0600  
From: "Stuart Rohre" <rohre@arlut.utexas.edu>  
To: <Boliver.Allmon@HALLIBURTON.com>  
Cc: <qrp-1@Lehigh.EDU>  
Subject: [117385] crystal receiver at HF  
Message-ID: <007001c19a3d\$e2b50040\$4e100a0a@rohredt2000>

HI,

I built my first crystal set for AM band, in a pen with loopstick tuning coil, and a clip on wire for antenna.



It worked into a crystal earphone, HIGH impedance, todays earbuds would NOT work, as they are low impedance.

I have a crystal set for HF, also. It is an Army surplus Field Strength Meter. Sometimes on 40m, I can hear some weak signals using high impedance army headphones. However, it is not a viable Short Wave set, as it is not selective enough, and it will not provide a BFO function for CW.

You might look into a simple superheterodyne receiver, and there are many of those in simple QRP transceivers such as the Ten Tec kits, Small Wonders Labs single band transceivers, Emtech, etc. These will be real receivers and have some watts for more reliable contacts than the novelty radios represented by the Tuna Tin. It is a good radio for a fun, what can it do use, but for day in and day out, more elaborate circuits will give you more satisfaction. The cost is still reasonable for those kits named, too.

72,  
Stuart K5KVH

-----  
Date: Thu, 10 Jan 2002 19:30:44 -0600  
From: "tmyers" <tmyers@AcademicPlanet.com>  
To: "QRP-L Post" <qrp-l@Lehigh.EDU>  
Subject: [117386] First kit for beginning ham ideas  
Message-ID: <00c201c19a3f\$98641ec0\$1600a8c0@newkid>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Bolivar:

This is a thought after your recent posts. If the first idea is to get a feel for QRP and you have never been on HF before, by a used 40M something from someone on the list. Get one with a VFO and make sure it is a transceiver. There are many out there that are really good.

Did you notice how fast the DSW-40 went on the list. That should tell you something about that rig. Lots of NC-40s and SW and SW+ show up on the list and they are a good starter radios for an inspired ham that will be just learning about QRP and CW. 40M would be my suggestion for a band as you probably have a day job and 40M is best at night.

This will tell you if you made the right decision for your situation.

This way you can work on getting your code speed up while you figure out which QRP rig you really want or what you really want on a QRP rig AND you will be on the air.

This is a great way to take a break from operating to build and building to operate.

73  
KQ5U, Terry  
Spring, Texas

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Date: Thu, 10 Jan 2002 17:52:53 -0800 (PST)  
From: Richard Fisher <ki6sn@yahoo.com>  
To: QRP-L Reflector <qrp-l@lehigh.edu>  
Cc: russ@natworld.com  
Subject: [117387] Now Showing - The ARS Sojourner  
Message-ID: <20020111015253.75642.qmail@web12107.mail.yahoo.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii

The January edition of the Adventure Radio Society's monthly web magazine, The ARS Sojourner, is hot off the virtual press and just a click away at:

<http://www.natworld.com/ars>

Here's what's in store this month:

- + A look at the Bazooka Vertical, By Craig McVey, AB8DY
- + Top of Indiana: Climbing the Hoosier Hill, By Dave Gingrich, K9DC
- + Well In Hand: Wilderness Contest Logging with a Palm-Sized Computer, by Dr. Bob Armstrong, N7XJ
- + The saga of New York's Mt. Beacon, by John Ceccherelli, N2XE
- + Buckeye to the Sky: Assault on Ohio's Campbell Hill, by Glen Hazen, N8WE
- + Results and Soapbox comments from January's Spartan Sprint, with special recognition of Skinny Division winner K0EVZ, and Tubby Division winner WA9TZE
- + From Our Vantage Point: For Spacious Skies, The ARS Sojourner
- + Who's Who and Who's New: New Members of the Adventure Radio Society, by Richard Fisher, KI6SN
- + Upcoming ARS events, including next month's Spartan Sprint, February 4, 2002
- + Wilderness Alerts for January, 2002 (regularly updated)

On behalf of webmaster Russ Carpenter, AA7QU, The ARS Sojourner staff and contributing writers, we hope you enjoy this edition. As always, we appreciate your feedback and welcome editorial contributions for coming editions.

Vy 72,

Richard Fisher, KI6SN  
Executive editor, The ARS Sojourner  
Riverside, CA  
KI6SN@yahoo.com

-----  
Do You Yahoo!?  
Send FREE video emails in Yahoo! Mail!  
<http://promo.yahoo.com/videomail/>

-----  
Date: Thu, 10 Jan 2002 19:56:17 -0600  
From: "Pat J. Whelton" <pwhelton@hal-pc.org>  
To: <qrp-1@Lehigh.EDU>  
Subject: [117388] Differences DSW & DSW+  
Message-ID: <003301c19a43\$2a5feae0\$7115fea9@halpc.org>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Can someone give me a brief overview of the difference between a DSW-40 and a DSW-40+?

Thanks,

Pat - KZ5J

-----  
Date: Fri, 11 Jan 2002 02:11:20 +0000  
From: Dragon Singer <WM-Scace@wiu.edu>  
To: "low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Subject: [117389] OT: ATN: OH hams  
Message-ID: <5.1.0.14.0.20020111020751.01e438b8@pop3.wiu.edu>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

Hi Gang,

Wayne K9DI es Sequoia here. I have a question for OH hams especially those that live in or near Dayton. As U all know I have a dog guide es I'm wondering if any of U know of a good vet near where we will be at? Just in case (heaven forbid) something untoward happens to Sequoia during FIDM. Although, Jim Crooke told me that he will be attending es bringing his traveling medical kit, I don't want to impose on him, besides he won't have alot of facilities if it's something major. On the other hand, I trust Jim since I (sorta) know him. Perhaps a local vet will extend use of his facilities to Jim if the need arises. Thank God we have an HMO fer Sequoia. I'm vy cautious with who I trust to treat Sequoia. He's my eyes. I'll also ask Dr. Putnam (Sequoia's vet) about some recommendations es referrals.  
72 es M00/00

Respectfully and Sincerely Yours,

Wayne M. Scace

k9di@arrl.net  
LICQ# 315313  
FISTS# 4409  
QRP-L# 2313  
FPQRP-L# 217  
SOC# 452  
ARS # 1,082  
Zombie # 800  
<http://k9di.homestead.com/K9DIHam1.html>

-----  
Date: Thu, 10 Jan 2002 21:21:53 -0500  
From: "N8IE" <n8ie@woh.rr.com>  
To: "QRP-1" <qrp-1@lehigh.edu>, "FPQRP-1" <fpqrp-1@mpna.com>  
Subject: [117390] Truffle Hunt de K8FP  
Message-ID: <MMEDLKDLONJOAIGICDJACEKBCDAA.n8ie@woh.rr.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Here's the results of the Truffle Hunt for 11/02. Thanks to all who gave it

a go. My first time as a truffle!! Very interesting !! Working Dan's new 570 at 5 watts to a G5RV. Thanks to all for bearing with me.

Daryl K8FP

0130 w5yr 559 tx george 5w  
0132 w8diz 559 oh diz 5w  
0133 k8cv 559 mi walt 5w  
0134 k4gt 559 ga jim 5w  
0135 n9ne 569 wi toby 5w  
0137 w4bqp 579 nc jim 5w  
0138 k5jhp 559 tx bill 5w  
0139 w0ch 579 mo dave 900mw  
0140 kg4ldy 559 va jim 5w  
0141 af4ps 559 fl mac 5w  
0143 we9k 559 wi glenn 5w  
0144 wv9n 559 oh roby 5w  
0145 ke6ti 599 in harold 3w  
0147 wa8vxn 559 oh mike 5w  
0148 k0evz 559 nd doc 5w  
0149 k8cz 559 oh tom 5w  
0150 k8mia 559 wv jim 5w  
0151 w5usj 559 tx chuck 5w  
0153 nu8s 559 oh dennis 5w  
0154 w9hl 559 il randy 5w  
0155 ac5jh 559 ok tom 5w  
0156 n8var 559 oh ron 5w  
0158 wa8wv 559 wv dave 500mw  
0159 wb6bwz 579 ga matt 5w  
0159 k9ut 559 in jerry 5w

-----  
Date: Thu, 10 Jan 2002 18:31:31 -0800  
From: "Trevor Jacobs" <fxtech@earthlink.net>  
To: <pwhelton@hal-pc.org>,  
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [117391] Re: Differences DSW & DSW+  
Message-ID: <002101c19a48\$151c8d00\$ca16f4d8@tjacobs>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

There isn't a DSW-40+ (at least not yet). The difference between the DSW-40 and the SW-40+ is mainly the use of an analog VFO in the SW+

versus a DDS VFO in the DSW. The DSW contains a microcontroller (PIC) that controls the DDS (Direct Digital Synthesizer - basically a digital frequency source/digital VFO) and also gives you the added benefit of a built in keyer and CW frequency annunciator. The DSW also includes RIT and tunes a much wider range of frequencies. The DSW is one of my favorite rigs.

72/73's

Trev

KG6CYN

----- Original Message -----

From: Pat J. Whelton <pwhelton@hal-pc.org>

To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

Sent: Thursday, January 10, 2002 5:56 PM

Subject: Differences DSW & DSW+

> Can someone give me a brief overview of the difference between a  
DSW-40 and

> a DSW-40+?

>

> Thanks,

>

> Pat - KZ5J

>

>

-----  
Date: Thu, 10 Jan 2002 21:30:29 -0500

From: "ss lyon" <sslyon@megalink.net>

To: <jamesd1@flash.net>,

"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>

Subject: [117392] Re: 2 M Quads.. etc.

Message-ID: <003301c19a47\$eff438c0\$038798ce@megalink.net>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

The ARRL antenna handbook, 13th edition (1977) pg 239 describes a 2 el quad that I built and stacked per instructions. Worked fine, was very quiet, but then I bought a pair of Cush Craft elevens and never looked back. If space is a problem, the quad 2 el is fine, esp. when stacked.

That brings up a secret notion (just between you and me) I've had for a long time and will explore now that I'm "retired" and plan to buy EZNEC. Consider

a stack of six or eight two or three el yagis as a contest antler. Now consider it kite flown at elevations of 150 or 200'.

73

AA1MY

Seabury & Sharon Lyon  
99 Sparrowhawk Mtn Rd  
Bethel ME, 04217 U.S.A.  
207-836-2576

Virus Protection by Norton and ZoneAlarm

----- Original Message -----

From: "James R. Duffey" <jamesd1@flash.net>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Sent: Wednesday, January 09, 2002 11:48 PM

Subject: 2 M Quads

> David - Long ago, 30 years or more, I built a 2 element 2 M quad from the  
> instructions in the Antenna book and VHF handbook of that era. It worked  
> fine with my Twoer. I think that they also showed how to stack these for  
> more gain.

>

> I can probably dig up these plans if you wish.

>

> If you are building more than a 2 element beam, you are probably better  
off

> with a Yagi. I suggest the "cheap and easy Yagis" at

>

> <http://www.clarc.org/Articles/uhf.htm>

>

> They are no harder to build than quads and perform just as well or better.  
I

> have built several and they are great performers.

>

> For very long beams at 2 M you might look at the Quagis that appear even  
in

> the latest ARRL Antenna Book. These too are easy to build. - Dr. Meacyle

> KK6MC/5 "Radio Green Chile"

>

>

> --

> James R. Duffey KK6MC/5

> Cedar Crest, NM DM65

>

-----

Date: Thu, 10 Jan 2002 19:42:28 -0700 (MST)  
From: "Karl F. Larsen" <k5di@zianet.com>  
To: <qrp-1@lehigh.edu>  
Subject: [117393] FOX: Got both tonight  
Message-ID: <Pine.LNX.4.33.0201101935130.3626-100000@Daisy.dog>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

W0UFO Mert is at 7.03612 MHz and working guys up 1-2 KHz. Just a few idiots calling on his frequency. He has a good 549 signal to my vertical.

N6WG Bob is at 7.04158 MHz and is working guys up about 1-1.5 KHz. I heard no people calling on Bob's frequency. Bob was 589 on my skywarmer 80 meter inverted V.

There is a bunch of Hounds out there and they are just doing it right. I will be surprised if both Foxes don't break a record or 2 as the band seems to be pretty good. Bob had a Mexican SSB station right over him so the 500 HZ 817 filter was required to copy him. Mert was on a clear frequency wonder of wonders...:-)

--

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -  
<http://www.zianet.com/k5di/>

-----  
Date: Thu, 10 Jan 2002 20:59:51 -0600  
From: "George, W5YR" <w5yr@att.net>  
To: rohre@arlut.utexas.edu  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [117394] Re: crystal receiver at HF  
Message-ID: <3C3E5527.E14E54E3@att.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Back in the 40's, I had a homebrew (by me) Field Strength Meter that I used with about a 3 foot rod antenna. Besides its normal uses, I could work a neighboring ham about 4 miles away on 75 phone! We each were running only about 250 watts \*input\* so that was doing a fair job. The meter incidently used that very first Sylvania "semiconductor diode" that they brought out



after WW2. Think it was a 1N34 . . .

72/73/oo, George W5YR - the Yellow Rose of Texas  
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe  
Amateur Radio W5YR, in the 56th year and it just keeps getting better!  
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771  
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All outgoing email virus-checked by Norton Anti-Virus 2002

Stuart Rohre wrote:

> I have a crystal set for HF, also. It is an Army surplus Field Strength  
> Meter. Sometimes on 40m, I can hear some weak signals using high impedance  
> army headphones. However, it is not a viable Short Wave set, as it is not  
> selective enough, and it will not provide a BFO function for CW.

-----  
Date: Thu, 10 Jan 2002 21:17:10 -0600  
From: "George, W5YR" <w5yr@att.net>  
To: "qrp-l@Lehigh.edu" <qrp-l@Lehigh.edu>,  
netxqrp <netxqrp@mailman.qth.net>, Flying Pigs <fpqrp-l@mpna.com>  
Subject: [117395] Another Good Week  
Message-ID: <3C3E5936.48161EA0@att.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Happy to report another great week in the Garden of the Yellow Rose! Maybe the new FP number (404) worked a little magic for me!

Got a Truffle and a Cub on Tuesday evening and a Truffle and two Foxii tonight.

Worked on Bob first for about 20 minutes, but between the QRO CW station almost zero beat with him and the XE SSB QRM and a less-than-outstanding signal level from Bob, it was no go. Thought I heard him come back to me a couple of times, but just no copy.

So, I hopped down to 7036 and found Mert who rewarded me at 0224 with a pelt. Very strong signal from Mert and he was really knocking them off - great op!

Then back up to 7041.8 where Bob was still holding forth. Luckily the CW station had quit but the SSB QRM was stronger than ever. But, after a few

calls, the SSB QRM faded down a little and Bob came up a little and fortune smiled - pelt #2 at 0231.

Thanks to all the guys who work so hard to put on these affairs and who manage to stick it out for 30 minutes or two hours and tackle the pileups. Maybe if I were only 50 years younger, I could play also! <:}

But being a Hound is enough fun now for this old man.

Just one suggestion for the Foxii: check your own frequency every now and then for QRM, such as the XE SSB stations, and move if you want to. We can find you again. While you are listening on your frequency, though, please do not take any calls there! <:}

72/73/oo, George W5YR - the Yellow Rose of Texas  
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe  
Amateur Radio W5YR, in the 56th year and it just keeps getting better!  
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771  
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All outgoing email virus-checked by Norton Anti-Virus 2002

-----  
Date: Thu, 10 Jan 2002 21:20:58 -0600  
From: Todd Enders <enders@bolshoi.cc.misu.nodak.edu>  
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [117396] Fox -- Looks Like Halfsies Again...  
Message-ID: <200201110321.AA01373@bolshoi.cc.misu.nodak.edu>  
Content-Type: text/plain  
Mime-Version: 1.0 (NeXT Mail 4.2mach\_patches v148.2)

Got Mert OK, after some considerable calling, but nailed him to the shack wall anyway. :-)

Bob, on the other hand, is ESP level here tonight. I can usually tell when he's sending, but that's about it. Local QRM not helping his cause. Hoping he'll come up for a shot or two before the end, but he's going to need some considerable help from the propagation gods... :-/

72/73,

Todd, AG0T

-----  
Date: Thu, 10 Jan 2002 22:39:36 -0500  
From: Dave Pomeroy <dave@dpomeroy.com>  
To: QRP-L <qrp-l@Lehigh.EDU>  
Subject: [117397] crystals  
Message-ID: <5.1.0.14.0.20020110223854.009d1220@mail.dpomeroy.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

Can anyone suggest a place to purchase custom crystals? Thanks in advance for your time.

Dave Pomeroy K8DNP South Western Michigan

-----  
Date: Thu, 10 Jan 2002 21:53:25 -0600  
From: "K5XU, Mike Duke" <k5xu@netdoor.com>  
To: <qrp-l@lehigh.edu>  
Subject: [117398] Another cheap enclosure and cable tie  
Message-ID: <00b201c19a54\$6e417b00\$2ed194d0@k5xu>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

In my area, we have a store called "Dollar Tree." Everything in this store costs \$1 or less. Last week, I bought a tin of Altoid spin-off mints called Ragold. They are packaged in a box similar to the Altoids. However, it is a little shorter, and noticeably thicker than the Altoids, but the same width front to back. I'm sure many projects or loose parts will fit into these little boxes unless you are trying to fit everything into the standard size Altoids tins.

I also found Velcro strips designed to wrap around a bundle of whatever. They were 6 to a card for \$1. I am using them to tidy up the tangle of cables behind my equipment.

Mike Duke, K5XU, President  
American Council of Blind Radio Amateurs

-----  
Date: Thu, 10 Jan 2002 20:01:48 -0800  
From: "Trevor Jacobs" <fxtech@earthlink.net>  
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [117399] Happy Dance Time!!!  
Message-ID: <004901c19a54\$b1c829a0\$ca16f4d8@tjacobs>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Man what a good night for fox hunting! Band's in great shape. Got a late start tonight and really needed to get both of them. Got Bob almost right away, and then went on the hunt for Mert. Man there were a lot of hounds chasing him, but I snuck in and bagged the pelt right around 3:50. Thanks to both of the fine FOXII tonight! You both were doing a great job weeding through all of us hunter. Nice to hear so many familiar calls on also. I'm going to have to start keeping a log of all the other hunters I hear.

72/73's  
Trev  
KG6CYN

-----  
Date: Thu, 10 Jan 2002 22:10:17 -0600  
From: "Gordon Cougar" <gcouger@couger.com>  
To: <dave@dpomeroy.com>,  
                "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [117400] Re: crystals  
Message-ID: <06a501c19a55\$e10874d0\$ab2dccd0@home>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

<http://www.icmfg.com/> International Crystal and <http://www.jancrystals.com/>  
JAN are the two old standards.

Gordon W5RED

----- Original Message -----  
From: "Dave Pomeroy" <dave@dpomeroy.com>  
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Sent: Thursday, January 10, 2002 9:39 PM

Subject: crystals

: Can anyone suggest a place to purchase custom crystals? Thanks in advance  
: for your time.

:  
:  
:

: Dave Pomeroy K8DNP South Western Michigan

:  
:

-----  
Date: Thu, 10 Jan 2002 22:48:28 -0600  
From: John Seboldt K0JD <k0jd-1@seboldt.net>  
To: qrp-1@Lehigh.EDU  
Subject: [117401] Square wave drive in DBM's (was New ADE mixers/tutorial)  
Message-ID: <5.1.0.14.0.20020110224703.00a18e80@mail.seboldt.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 11:31 AM 1/10/02 -0700, you wrote:

>However, recall that a square wave is a fundamental frequency rich in  
>harmonics, and using a square wave LO will produce LO harmonics on the  
>IF output, with the 3rd harmonic being the strongest. So if the mixer  
>is used for upconversion, check where these harmonics and the resulting  
>images will fall. This is not so much of a concern for down conversion  
>(when your IF frequency is lower than your RF frequency).

Hmm, doesn't the harmonic get generated in the mixer even with sine wave drive?

John K0JD

-----  
Date: Fri, 11 Jan 2002 04:51:25 -0000  
From: "TC Dufresne" <tdufresne@neb.rr.com>  
To: <qrp-1@lehigh.edu>  
Subject: [117402] SW+20 question  
Message-ID: <006101c19a5b\$9ff94720\$a4b91c41@neb.rr.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
          charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

I recently got my SW+20 on the air.

All and all, it seems like a good rig, fun to build.

However, I seem to only have about 36kHz of "bandspread", and I can only use about 25 kHz of that because of my license. I get about 14.013MHz to 14.050MHz. I am putting out about 1.75w to my HMBRU vertical antenna.

What can I do to increase my effective range? Can I somehow change it so I can get, say, 14.025 to 14.060MHz or so? Am I asking too much?

Curious,

Tom

KC0GXX

-----  
Date: Fri, 11 Jan 2002 05:21:33 +0000  
From: "Dennis Ponsness" <wb0wao@hotmail.com>  
To: tdufresne@neb.rr.com, qrp-1@Lehigh.EDU  
Subject: [117403] Re: SW+20 question  
Message-ID: <F222utePDlw33diWF5l0000f8fd@hotmail.com>  
Mime-Version: 1.0  
Content-Type: text/plain; format=flowed

Tom - I have built the SW-30+ and SW-40+ and love 'em. You picked a great rig to build! There are a couple of ways that you can move the freq range....

- 1) You can change the capacitor (C7??) that is just to the left of the toroid. The manual discusses this.
- 2) You can compress or spread the winding on the above mentioned toroid to move the freq range around.

Dave, W1SWL, posts here every so often, so he may be able to be more specific. I am at work, so I don't have the schematics here with me!

Good Luck!

72 es oo

Dennis - WB0WAO

>From: "TC Dufresne" <tdufresne@neb.rr.com>  
>Reply-To: tdufresne@neb.rr.com  
>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

>Subject: SW+20 question  
>Date: Fri, 11 Jan 2002 04:51:25 -0000  
>  
>I recently got my SW+20 on the air.  
>  
>All and all, it seems like a good rig, fun to build.  
>  
>However, I seem to only have about 36kHz of "bandspread", and I can only  
>use  
>about 25 kHz of that because of my license. I get about 14.013mHz to  
>14.050mHz. I am putting out about 1.75w to my HMBRU vertical antenna.  
>  
>What can I do to increase my effective range? Can I somehow change it so I  
>can get, say, 14.025 to 14.060mHz or so? Am I asking too much?  
>Curious,  
>Tom  
>KC0GXX  
>  
>

---

MSN Photos is the easiest way to share and print your photos:  
<http://photos.msn.com/support/worldwide.aspx>

---

Date: Thu, 10 Jan 2002 21:32:02 -0800  
From: "Bob Tellefsen" <n6wg@earthlink.net>  
To: <qrp-1@lehigh.edu>  
Subject: [117404] Fox: N6WG Prelim. Log  
Message-ID: <MABBJOEABOILMKCJCLFCGENDCPAA.n6wg@earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Well another fun time is history.  
This session went pretty well, but I almost had heart failure when,  
around a quarter hour after the start, I couldn't find any stations calling  
me for about three minutes. Those were very long minutes until the pack  
picked up the cry again. I suspect QRM on my frequency must have blotted my  
signal.

Trivia time--85 pelts handed out, spread over 31 states/provinces. I'm

really happy to see more VE participants than I recall from the past.  
Had 2 1W hounds, 3 3W hounds, 1 4W hound and the rest were all 5W.  
It was great to hear Ed, WE6W, back on the air. He was just pounding in here.

Had two dupes. I expect they were not able to hear my QSL to them.  
W7ILW and WE9K, I'll drop your first entries in my log, and keep your second one, as I expect that is the one you have in your logs.

Here's my first pass log. Everyone, please check your contact, and let me know if a correction is needed. Otherwise, these become PERMANENT RECORDS of the illustrious Fox Hunt.

0201	WR50	559	TX	DAVE	5W	
0202	K0FRP	579	CO	AL	5W	
0203	AA7XA	559	OR	FRANK	5W	
0204	W4NJK	559	CA	CHARLIE	5W	
0205	VE6EX	559	AB	DAN	5W	
0206	NK6A	559	CA	DON	5W	
0207	WE6W	599	CA	ED	4W	
0208	N1FN	559	CO	ET	5W	
0208	K6VNX	599	CA	ARLEN	5W	
0209	KB7WW	559	OR	ART	5W	
0210	K0EVZ	559	ND	DOC	5W	
0213	KB9LGJ	559	CA	TIM	5W	
0214	K5DI	559	NM	KARL	5W	
0215	W3CD	599	CA	BOB	5W	
0216	W7ILW	559	AZ	WALT	5W	DUPE
0219	W8RU	559	MI	RON	5W	
0220	VE6KG	559	AB	NORM	5W	
0221	AK1P	579	CA	PAUL	5W	
0229	N4ROA	559	VA	DON	5W	
0230	AD6JV	559	CA	BILL	5W	
0231	W5YR	559	TX	GEORGE	5W	
0232	N9NE	559	WI	TODD	5W	
0233	N0AR	559	MN	SCOTT	5W	
0234	VA6RF	559	AB	EARL	5W	
0235	N0RC	559	CO	ROD	5W	
0236	KC0ATC	339	CO	CHRIS	3W	
0238	N0TU	559	CO	STEVE	5W	
0239	W7ILW	559	AZ	WALT	5W	
0240	KG6CYN	599	CA	TREV	5W	
0241	N7DMA	559	AZ	KARL	5W	
0243	N2WW	559	CO	LARRY	5W	
0244	KN6YD	599	CA	JEFF	5W	
0245	AC5JH	559	OK	TOM	5W	
0247	AC6JA	599	CA	MIKE	5W	
0248	K4GT	559	GA	JIM	5W	



0249	WA8WV	559	WV	DAVE	5W	
0250	N9AW	559	WI	JERRY	5W	
0250	W0RSP	559	SD	ADE	3W	
0252	K5JHP	559	TX	BILL	5W	
0253	K4XR	559	AL	CRAIG	5W	
0254	K3PH	559	PA	BOB	5W	
0255	AA50	559	LA	VERN	5W	
0256	W0CH	559	MO	DAVE	5W	
0256	KE6RS	559	CA	RON	5W	
0257	N1TP	559	FL	TOM	5W	
0259	KB9YIG	339	IN	TONY	5W	
0300	WE9K	559	WI	GLENN	5W	DUPE
0302	AB0CD	559	CO	DICK	5W	
0303	K0PC	559	MN	PAT	5W	
0304	WA9TZE	339	WI	JIM	5W	
0306	KR5C	559	TX	GEORGE	5W	
0307	K9DC	559	IN	DAVE	5W	
0308	KI0II	559	CO	RON	1W	
0309	K9IS	559	WI	STEVE	5W	
0310	KK5LD	559	TX	DAN	5W	
0311	KQ5U	559	TX	TERRY	5W	
0312	W5TB	559	TX	DOC	5W	
0313	K5EOA	559	LA	WAYNE	5W	
0315	W5USJ	559	TX	CHUCK	5W	
0316	K7EL	559	OR	DAVE	5W	
0317	KD5KXF	559	TX	MIKE	5W	
0318	K4FB	449	FL	PAUL	5W	
0320	NG7Z	559	WA	PAUL	5W	
0321	AF4LQ	559	KY	MIKE	5W	
0322	K4ADI	559	SC	FRANK	5W	
0323	WV9N	559	OH	RANDY	5W	
0325	N7CQR	559	OR	DAN	5W	
0326	W9XU	559	WI	DON	5W	
0327	N0RRL	559	MN	KEN	5W	
0328	K5TZY	559	TX	BILL	5W	
0330	K5DW	559	TX	DON	5W	
0332	VE4WI	449	MB	CRAIG	5W	
0333	WE9K	559	WI	GLENN	5W	
0336	KC1FB	559	CT	JIM	5W	
0338	K4TJD	559	GA	TOM	5W	
0339	N0TK	559	CO	DAN	1W	
0340	N0UR	559	MN	JIM	5W	
0342	KV2X	559	NY	TOM	5W	
0344	AF4PS	559	FL	MAC	3W	
0345	K7TQ	559	ID	RANDY	5W	
0346	W0PWE	559	IA	JERRY	5W	
0347	NK9G	339	WI	RICK	5W	
0349	NQ7X	559	AZ	FLOYD	5W	

0351 KK0C 339 MO JIM 5W  
0354 NQ7K 559 AZ MIKE 5W  
0356 NK0E 559 CO DAVE 5W  
0358 NV4V 559 KY PETE 5W  
0400 N6WG 599 CA FOX 5W

73, Bob N6WG

-----  
Date: Fri, 11 Jan 2002 07:30:39 +0000  
From: euramcom pages <mel@euramcom.freeserve.co.uk>  
To: <wm-scace@wiu.edu>  
Cc: <qrp-l@lehigh.edu>  
Subject: [117405] Re: Did U see this shite??  
Message-ID: <T5860dd7f5fac1785b30d8@pcow057o.blueyonder.co.uk>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="iso-8859-1"  
Content-Transfer-Encoding: quoted-printable

Hi Wayne et al,

It all seems a bit academic, especially if you're one of those affected.

"MORSE BLIND" but professionally involved in radio for over 20= years  
now as well as being a ham, tried even at 5 wpm and failed disastrously.

Know of two or three others who have no interest in HF at all,= whose  
technical knowledge I would back against any, certainly in the UK= if  
not world-wide who are in the same boat. I'm talking about guys= (not  
me I might add) who have hand built synthd 2m rigs from scratch= to  
their own designs and so on, in some respects more technically demanding than HF qrp stuff.

So? well the RSGB is going with the flow and saying, since CW requirements are to disappear shortly anyway, let;s relax things= now  
for those who want a full (HF bands) ticket before then.

I don't personally think it will make much difference one way or=

the  
other/

2p worth

Regards

me1

-----  
Date: Fri, 11 Jan 2002 01:19:15 -0800  
From: "Dave Fifield" <dave@redhotradio.com>  
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [117406] Re: Did U see this site?  
Message-ID: <003701c19a81\$0a47a250\$0500a8c0@AD6A>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Can we change the subject line on this thread  
please. There are children reading this list.

It may be a simple misspelling of the word  
"site", but it is also a common (Scottish)  
pronunciation of the four letter "S" word.

Thank you for your cooperation.

72, Dave, AD6A

-----  
Date: Fri, 11 Jan 2002 06:17:03 -0500  
From: kb1dxc <kb1dxc@discovernet.net>  
To: qrp-1@Lehigh.EDU  
Cc: tdufresne@neb.rr.com  
Subject: [117407] Re: SW+20 question  
Message-ID: <a05100300b86478d80f96@[216.221.130.16]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii" ; format="flowed"

Tom,

I also have an SW +20 and I could not get a capacitor that

put me where I wanted to be. I did the next most logical thing that I could think of. I had an old air variable cap and I replace the cap, I think I recall it to be C7, and with the air variable. Guess what, I can tune up and down most of the band now. What I did was find where the air variable would put my top frequency at 14.062, this gave me the QRP calling frequency and down for most of the CW portion of the band. You do have to be careful when you have the air variable in there because it would allow you to transmit out of band.

Good Luck,  
Mike,  
KB1DXC

>I recently got my SW+20 on the air.  
>  
>All and all, it seems like a good rig, fun to build.  
>  
>However, I seem to only have about 36kHz of "bandspread", and I can only use  
>about 25 kHz of that because of my license. I get about 14.013MHz to  
>14.050MHz. I am putting out about 1.75w to my HMBRU vertical antenna.  
>  
>What can I do to increase my effective range? Can I somehow change it so I  
>can get, say, 14.025 to 14.060MHz or so? Am I asking too much?  
>Curious,  
>Tom  
>KC0GXX

-----  
Date: Fri, 11 Jan 2002 06:55:19 -0500  
From: "John J. McDonough" <wb8rcr@arrl.net>  
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Cc: <gcouger@couger.com>  
Subject: [117408] Re: crystals  
Message-ID: <000f01c19a96\$d8d51660\$010044c0@chartermi.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

FWIW, my experience with International Crystal has been outstanding. They seem to have immediate access to the specs for every radio ever built. When you call them, you only need to know the radio and the operating frequency - they will know the IF offset, multiplier, load capacitance, all those other things that crystal manufacturers need to know to get you exactly the right crystal. What amazes me is that even for ancient radios, they seem to be able to find the specs in about a microsecond.

All this comes at a price, of course. It generally takes a couple of weeks to get your crystals made, and they generally cost around \$15 each, plus shipping. This is sort of a shock if you are thinking 87 cent microprocessor crystals. A transmit plus receive crystal is going to be pushing fifty bucks by the time you get them in your hot little hands.

72/73 de WB8RCR      <http://www.qsl.net/wb8rcr>  
didileydadidah      QRP-L #1446 Code Warriors #35

----- Original Message -----

From: "Gordon Couger" <gcouger@couger.com>  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Sent: Thursday, January 10, 2002 11:10 PM  
Subject: Re: crystals

> <http://www.icmfg.com/> International Crystal and  
> <http://www.jancrystals.com/>

> JAN are the two old standards.

>

> Gordon W5RED

>

> ----- Original Message -----

> From: "Dave Pomeroy" <dave@dpomeroy.com>  
> To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
> Sent: Thursday, January 10, 2002 9:39 PM  
> Subject: crystals

>

>

> : Can anyone suggest a place to purchase custom crystals? Thanks in  
advance

> : for your time.

> :

> :

> : Dave Pomeroy K8DNP South Western Michigan

> :

> :

>

-----  
Date: Fri, 11 Jan 2002 07:00:21 -0500  
From: John R Kirby <n3aaz-qrp@juno.com>  
To: qrp-l@Lehigh.EDU  
Subject: [117409] Re: Did U see this wxyz ??  
Message-ID: <20020111.070205.-151527.0.n3aaz-qrp@juno.com>

MIME-Version: 1.0  
Content-Type: text/plain  
Content-Transfer-Encoding: 7bit

Ah . . . Oh MY ! !

Such a treasure of knowledge this group.

> > to be labled an "old geezer." <<

Thank you . . .

Now, I need all the help I can get . . .

Please someone pronounce > foogta < for me.

FOOFTA - foogta

Remember when . . .  
100 Watts was considered QRP and Novice MAX power was 75?

00TC (43+) and still counting.  
John  
N3AAZ  
FM 19 xa

-----  
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-----  
Date: Fri, 11 Jan 2002 06:01:36 -0600  
From: Mark Fields <mark\_ke5my@juno.com>  
To: qrp-l@lehigh.edu  
Subject: [117410] My e-mail (via Juno) seems to be coming OK now; how about the rest of you?  
Message-ID: <20020111.060219.-152037.1.mark\_ke5my@juno.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hello, everyone. It's been quite a while since I last posted any "Is anyone out there?" messages to this reflector. That was because I was getting almost nothing for many days at a time.

After sending another complaint message to Juno, they looked into the matter, and, I believe, \*finally\* fixed the problem. I'm getting all of the messages that are posted, and I was just wondering--are those of you who are also Juno subscribers getting all of your e-mail?

73, Mark, KE5MY  
QRP-L #2365

-----  
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-----  
Date: Fri, 11 Jan 2002 07:28:28 -0500  
From: Tim O'Rourke <TO'Rourke@KaiserFT.com>  
To: "'qrp-l@Lehigh.EDU'" <qrp-l@Lehigh.EDU>  
Subject: [117411] Re: [GQRP] Altoids, toabcco tins etc  
Message-ID: <0514B74864ACD511934400508BBB5E3401E210@EMAIL1>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"

I will do you one better. I bought a tube for a future project from Rex Harper, W1REX it was just before Christmas. When the tube arrived it was in a Christmas stocking along with some neat extra goodies. The best was a Box of QRP mints in an Altoid Tin , with mints intact. Loved it Rex my xyl and I had a big giggle. My daughter just rolled her eyes.  
Tim O'Rourke KG4CHX

-----  
Date: Fri, 11 Jan 2002 13:09:28 GMT  
From: Thomas Jennings <jennings@eznet.net>  
To: n6wg@earthlink.net  
Cc: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [117412] Re: Fox: N6WG Prelim. Log  
Message-ID: <20020111130928.20194.qmail@eznet.net>  
Mime-version: 1.0  
Content-type: text/plain; charset="us-ascii"

Bob,  
You were very weak here in WNY but being persistant paid off plus listenting to the hound. I did not hear you until the second hour.  
I heard somebody call CQ on your freq and then came a bunch of

QRls and the guy moved!!!

Great job handling all the hounds.

73,  
Tom kv2x

-----  
Date: Fri, 11 Jan 2002 06:21:40 -0700  
From: Tim and Nancy Logan <cyr999@extremezone.com>  
To: qrp-l@Lehigh.EDU  
Subject: [117413] FS: OHR500 still needs home!  
Message-ID: <3C3EE6E4.205E35E8@extremezone.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hi folks - I have an OHR 500 I built which is truly a jewel. It catches everything my K2, K1, or OMNI V.9 hears and it is extremely quiet. I bought an ICOM R75 for general coverage and need to sell the OHR. It has OHR's internal keyer, comes with the Z-11 tuner and the DD-1 Freq Readout, as well as a great little R/S Speaker (about a 2X2 cube!). The rig is a 10 and hard to part with - but something has to give. It needs a good home. I am asking \$500 for the package - which is not bad if you add up the new price of this gear. If you know the rig and have an interest, please e-mail me direct as I get QRP-L in digest form. Thanks for allowing this post. 73/KB70EX Tim Logan Gilbert, AZ

-----  
Date: Fri, 11 Jan 2002 05:23:19 -0800 (PST)  
From: Chuck Carpenter <W5USJ@go.com>  
To: qrp-l@Lehigh.EDU, netxqrp@mailman.qth.net  
Subject: [117414] Bit Bucket Test  
Message-ID: <1662088.1010755399481.JavaMail.W5USJ@gomailjtp04>  
MIME-version: 1.0  
Content-type: text/plain; charset=iso-8859-1  
Content-transfer-encoding: 7BIT

Reading this verifies that it didn't go to the bit bucket.

Chuck, W5USJ, Point, Rains Co TX EM22cv, NE-TX QRP #1

-----  
GO.com Mail  
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-----  
Date: Fri, 11 Jan 2002 08:27:20 -0500  
From: "William K. Harding" <k4ahk@ix.netcom.com>  
To: "QRP-L Mail" <qrp-l@lehigh.edu>  
Subject: [117415] NoVaQRP gathering  
Message-ID: <E16P1h6-0001KJ-00@tisch.mail.mindspring.net>  
Mime-version: 1.0  
Content-type: text/plain; charset="US-ASCII"  
Content-transfer-encoding: 7bit

This coming Saturday, Jan. 12, is the next gathering of the Northern Virginia QRP Group at Mama's restaurant in Fairfax, VA. Pizza, lies, toys and fun for all.

If you need additional info, please e-mail me at:

k4ahk@novaqrp.org

Bill - K4AHK

-----  
Date: Fri, 11 Jan 2002 08:29:43 -0500  
From: W2AGN <w2agn@pobox.com>  
To: "Dave Fifield" <dave@redhotradio.com>,  
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [117416] Re: Did U see this site?  
Message-ID: <0201110829430C.02371@CC2289974-A>  
Content-Type: text/plain;  
charset="iso-8859-1"  
MIME-Version: 1.0  
Content-Transfer-Encoding: 8bit

On Friday 11 January 2002 04:19, Dave Fifield wrote:

> Can we change the subject line on this thread  
> please. There are children reading this list.  
>  
> It may be a simple misspelling of the word  
> "site", but it is also a common (Scottish)  
> pronunciation of the four letter "S" word.  
>

--

I thought right away that was what it was, and I'm not even Scottish.

-----  
John L Sielke W2AGN  
w2agn@pobox.com  
<http://www.qsl.net/w2agn>  
Trustee: W3IYQ  
-----

Date: Fri, 11 Jan 2002 08:54:05 -0500  
From: Bruce Muscolino <w6toy@erols.com>  
To: WM-Scace@wiu.edu  
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>  
Subject: [117417] Re: OT: ATN: OH hams  
Message-ID: <3C3EEE7D.85392192@erols.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Wayne,

The Hamvention committee used to have an email service that would answer questions such as this. Have you contacted the Hamvention directly? They want to make your experience the best they can, because you actually might come back!

73

-----  
Date: Fri, 11 Jan 2002 07:40:56 -0700 (MST)  
From: cherry@getnet.net  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [117418] Re: Antenna info  
Message-ID: <1010760056.3c3ef97881658@mail.getnet.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 8bit

There is the super "C" antenna that is very short.  
<http://www.gapantenna.com/>  
Jim W7ANF

Quoting Bob Tellefsen <n6wg@earthlink.net>:

> Bill

> Your friend didn't specify why he can't get the antenna above 5 or 6  
> feet.  
> If it is due to a lack of supports, there are many ways to solve that.  
> If  
> it is a CC&R issue, he may have to live with the low height.  
>  
> Having said that, there are still things he can do on 20m to use the  
> height  
> he has. I would suggest a vertical, either an inverted L or a T. He  
> will  
> need to lay out some radials, but this will do far more for him than a  
> very  
> low dipole at 20m. The vertical section could be a piece of copper  
> tubing 6  
> ft long, and he could use 2 or 4 evenly spaced top loading wires. Heck,  
> if  
> he has the horizontal space, he could phase two of them, or arrange them  
> as  
> a driven element and a reflector. There are lots of games he can play  
> to  
> exploit the space he has.  
>  
> 73, Bob N6WG  
>  
>

-----  
Date: 11 Jan 2002 05:46:35 -0500  
From: Caitlyn Martin <ku4qd@qsl.net>  
To: gcouger@couger.com  
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>  
Subject: [117419] Re: crystals  
Message-ID: <1010745998.2322.9.camel@localhost.localdomain>  
Content-Type: text/plain  
Content-Transfer-Encoding: 7bit  
Mime-Version: 1.0

Hi,

> <http://www.icmfg.com/> International Crystal and <http://www.jancrystals.com/>  
> JAN are the two old standards.

International Crystal is probably the best there is. I have had very poor results with Jan Crystals, and I've heard the same from many other hams. Another good source is Crystek, <http://www.crystek.com>

73,

Caity  
KU4QD

-----  
Date: Fri, 11 Jan 2002 11:01:04 -0500  
From: "Richard Brummer, K2JQ" <k2jq@bestweb.net>  
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [117420] Re: crystals  
Message-ID: <00ca01c19ab9\$2d41d180\$b703b3d8@obvious>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Dito here !

I have never tried Jan, but I was led to International by an "elmer" over 35 years ago, and have never been disappointed.

73,  
Dick K2JQ  
-----Original Message-----  
From: Caitlyn Martin <ku4qd@qsl.net>  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Date: Friday, January 11, 2002 10:52 AM  
Subject: Re: crystals

>International Crystal is probably the best there is. I have had very  
>poor results with Jan Crystals, and I've heard the same from many other  
>hams. Another good source is Crystek, <http://www.crystek.com>

>  
>73,  
>Caity  
>KU4QD  
>  
>

-----  
Date: Fri, 11 Jan 2002 11:13:53 -0500  
From: "John L. \"Jake\" Carter" <jakecart@ix.netcom.com>  
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [117421] Diode mixers -- example of their application, the 2N2-40

Message-ID: <GCECIJFJPOHMCKACOA0BMEDFDFAA.jakecart@ix.netcom.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="us-ascii"  
Content-Transfer-Encoding: 7bit

I like this diode mixer discussion. If you want to see an example of their application, check out a design that a lot of us are building -- Jim Kortge's (K8IQY) 2N2-40 rig at <http://www.qsl.net/k8iqy/> .

The schematics are at  
<http://groups.yahoo.com/group/2n2-40/files/2N240%2B%20Schematics/> .

The receive mixer is at  
<http://groups.yahoo.com/group/2n2-40/files/2N240%2B%20Schematics/2N240%2BSheet1v.PDF> .

The IF and product detector is at  
<http://groups.yahoo.com/group/2n2-40/files/2N240%2B%20Schematics/2N240%2BSheet2v.PDF> .

There is a good discussion group going at  
<http://groups.yahoo.com/group/2n2-40/messages/> .

73,

Jake -- N4UY

-----  
Date: Fri, 11 Jan 2002 16:29:44  
From: "Brad Hernlem" <alihernlem@hotmail.com>  
To: w6toy@erols.com  
Cc: qrp-l@lehigh.edu  
Subject: [117422] Re: Another Mech Filter Question  
Message-ID: <F1999NmXyYmbsskpHEb00020eb1@hotmail.com>  
Mime-Version: 1.0  
Content-Type: text/plain; format=flowed

Bruce,

These are actually soldered in units and, yes, they have ground pins on each end but there are two other pins on each end, as well. They are tied in to the rest of the circuit as if they are driven differentially (push-pull) direct from the Gilbert cell (MC1496G) ports, i.e. the '1496 has two signal input pins and the filter is attached pin for pin.

BTW, it was shown to me that I was wrong to think of the attached resistors as acting in parallel, so indeed the termination impedance is correct.

BTW, what happens with the second pins in the single ended devices? Are they just tied to ground inside the unit?

Brad

>From: Bruce Muscolino <w6toy@erols.com>  
>Most filters have one input and one output. They also have a ground.  
>Are you sure that your filters are not configured so as to have the  
>ground lead brought out to each end?  
>  
>Why don't you ask Collins! Collins has used many different mounting  
>arrangements for their filters. Some clip in, some plug in, and some  
>solder in! It sounds like you may have the clip in type.  
>  
>73

---

Send and receive Hotmail on your mobile device: <http://mobile.msn.com>

---

Date: Fri, 11 Jan 2002 09:44:24 -0700  
From: "John\_Evans" <jaevans@codenet.net>  
To: <qrp-1@Lehigh.EDU>  
Subject: [117423] Murata filter specs for Epiphyte 3  
Message-ID: <200201110944.AA17695228@mail.codenet.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii

Greetings,

I am planning on building the Epiphyte 3 but need the specs for the Murata 455J1 SSB filter so that I may find a substitute. Has anyone built the rig from the norcal card and gotten a sub filter to work? I am interested in hearing of your experiences. Your help would be appreciated.

tnx es 72 - john - n0hj

---

Date: Fri, 11 Jan 2002 08:40:02 -0800  
From: Roger Traylor <traylor@ece.orst.edu>

To: John Seboldt K0JD <k0jd-1@seboldt.net>  
Cc: qrp-1@Lehigh.EDU  
Subject: [117424] Re: Square wave drive in DBM's (was New ADE mixers/tutorial)  
Message-ID: <20020111084002.A21385@brilthor.ECE.ORST.EDU>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Disposition: inline

John,

I firmly believe so. I have connected a sine wave source to the LO port and looked at the LO port with a oscope. The waveform is a very clipped sine wave, and pretty much looks like a square wave. So yep, even with sine wave drive you get harmonics. I think that the big sine waves are used to make the edges(transitions) look like square waves.

Roger Traylor  
WB4TPW

On Thu, Jan 10, 2002 at 10:48:28PM -0600, John Seboldt K0JD wrote:

> At 11:31 AM 1/10/02 -0700, you wrote:  
> >However, recall that a square wave is a fundamental frequency rich in  
> >harmonics, and using a square wave LO will produce LO harmonics on the  
> >IF output, with the 3rd harmonic being the strongest. So if the mixer  
> >is used for upconversion, check where these harmonics and the resulting  
> >images will fall. This is not so much of a concern for down conversion  
> >(when your IF frequency is lower than your RF frequency).  
>  
> Hmm, doesn't the harmonic get generated in the mixer even with sine wave drive?  
>  
> John K0JD

-----  
Date: Fri, 11 Jan 2002 09:10:32 -0800  
From: Roger Traylor <traylor@ece.orst.edu>  
To: Glen Leinweber <leinwebe@mcmail.cis.mcmaster.ca>  
Cc: qrp-1@Lehigh.EDU  
Subject: [117425] Was: ADE mixers, Now: driving mixers  
Message-ID: <20020111091032.B21385@brilthor.ECE.ORST.EDU>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Disposition: inline

Glen,

Thanks for the info on the HC04. I wasn't aware of them being such a convenient match. I'll probably stick to my AC04

cause I like their fast edges.

You bring out a good point about coax to the mixer. I put the AC04/termination as close to the mixer as possible. I also use surface mount components; the AC04, terminations and coupling capacitor. Trying to remotely drive the mixer through coax does give a very wierd waveform.

This brings up another point. If other ports to the mixer aren't terminated well, it makes finding a resonable match to the L0 port difficult.

Hmmm... rms power from square waves, seems like I have to look this up at least once a year. Its a factor of  $\sqrt{2}$  for sine waves but for square waves.....hmmm... wouldn't it just be  $v^2/R$  for two square regions....hmmm... so for +7dbm it looks like a 0.5vp (1vpp) signal into 50 ohms? This is dangerous thinking out loud on the list. I better go get a text book! Maybe someone will refresh my memory.

Roger Traylor  
WB4TPW

On Thu, Jan 10, 2002 at 08:41:16PM -0800, Glen Leinweber wrote:

- > Roger,
- > Rick "took back" his hypothesis about 1/f noise. Turns out he
- > measured noise with no L.O. In this case, the mixer is effectively
- > an open circuit. The noise he measured was noise from a
- > pretty high impedance (!) and therefore quite high.
- >
- > Driving with square waves should be done with care. Any
- > coax coupling these waves to the mixer can reflect signals
- > back 'n forth (the mixer is a weird load), and give some
- > strange waveshapes. Some 50 ohm padding right at the mixer
- > might be a good idea in this case.
- > Or drive the L.O. port with near zero lead length from the
- > AC drivers.
- > HC04 can be used - their output Z is around 50 ohms.
- > In any case, some resistive padding must be used to reduce
- > driving voltage and current.
- > What I want to know is this: Minicircuits specs the L.O.
- > drive assuming a sinewave going into a 50 ohm resistive load,
- > and they spec the power (ie: +7dBm) into that resistive load.
- > Then substitute the mixer's L.O. port for the 50 ohm resistor.
- > In actual fact, the mixer's diode current is what's being
- > specified. Substituting RMS powers for square waves (from
- > sine waves) likely overdrives the diodes. So I want to know
- > what diode current the mixers are comfortable with.



>  
> ----- Original Message -----  
> From: "Roger Traylor" <traylor@ece.orst.edu>  
> To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
> Sent: Thursday, January 10, 2002 5:04 PM  
> Subject: Re: New ADE mixers/tutorial  
>  
>  
> > Paul and Gang,  
> > You stated that....  
> >  
> > > ..... As a diode turns on, it makes noise as the impedance is  
> > > changing drastically at the moment the diode turns on and current begins  
> > > to flow. If the L0 is a sine wave, that transition period is often  
> > > considered to be about 20-30 degrees of the L0 sine wave, and even  
> > > longer  
> > > if your L0 drive is less than recommended. But by slamming a square  
> > > wave  
> > > into the mixer as the L0, you are turning those diodes on very quickly,  
> > > (a few nS, which is a few degrees for the low L0 frequencies we tend to  
> > > use), which reduces the overall noise generated by the mixer.  
> >  
> > The "noise" that you refer to; is it 1/f noise or some other noise source?  
> > I usually see that the noise figure of a mixer is essentially identical  
> > to its loss.  
> >  
> > I am most concerned with the 1/f noise that Rick Campbell has noted in his  
> > analysis of DC receivers which are of interest to me. If square wave  
> > drive helps this, I would love to know. I know that square wave drive  
> > improves the IP3 numbers.  
> >  
> > I personally drive diode mixers from 74AC04 inverters. I parallel two  
> > inverters and source terminate with a 43 ohm resistor. Following this is  
> > usually a attenuator to drop the drive level to +7dbm for a SBL-1 or  
> > equiv.  
> > The output impedance of the inverters is roughly the DC output resistance  
> > of the device. (Got this fact from a TI apps engineer) This value is  
> > easially  
> > determined with a variable resistor and power supply. I have found the AC  
> > series of parts to typically have an output impedance of about 14 ohms in  
> > either high or low state. Thus two in parallel gives an output impedance  
> > of  
> > 7 ohms with the remainder made up with the 43 ohm resistor.  
> >  
> > As for the output rise time, two of the inverters together into 50 ohms  
> > looks like about 2ns. Darn fast transssitions. The power consumption is  
> > much less than a class A amplifier too. Also it is very easy to  
> > accurately

> > determine the drive level to the mixer. You can also make it variable  
> just  
> > by adjusting the AC04's Vdd line. This may vary the output impedance a  
> > little bit however.  
> >  
> > For the curious, don't try this with a 74HC04. The output impedance is  
> much higher.  
> >  
> > It is refreshing to see technical discussions here. Thanks.  
> >  
> > Best wishes,  
> >  
> > Roger Traylor  
> > WB4TPW  
> >

-----  
Date: Thu, 10 Jan 2002 19:46:58 -0700  
From: Ron KU7Y <mswmod@bigplanet.com>  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [117426] Re: Identifying Oneself as QRP  
Message-ID: <000301c19ac7\$74c19e60\$d5c0a9d8@oemcomputer>  
MIME-version: 1.0  
Content-type: text/plain; charset=iso-8859-1  
Content-transfer-encoding: 7bit

Hi Jim and All,

Interesting comments but.....

Now I realize that I have only been playing around with QRP for about 50 years now and might not have made enough contacts to have a feel for what's going on but here is my take on things anyway.

I have NEVER had a station quit a QSO with me because I was running QRP. I seldom send QRP but rather just send the power that I'm using. However, I have had a lot of stations begin to have a hard time copying me as the band conditions change. I know this because I also notice that their signals are getting weaker. That means that mine MUST also be getting weaker. I'll often ask if they can still copy OK. If they begin to have trouble I will increase the power if I'm using a "big" rig or I just begin to end the QSO.

I call CQ and get close to the same amount of takers without regard to how much power I'm running. If I have a great antenna like I did just before I retired, I KNEW that my 5w signal was LOUD. Now, with a silly little screwdriver antenna, I know that my 5w signal isn't going to be burning many big holes in the clouds. But I still THINK LOUD. There is NO reason to get on the air with

the feeling that you are not going to be heard by anyone! In these noisy RV parks I generally am the one who loses the other station in the noise!

Just because a station doesn't finish a QSO and you had just mentioned your power, don't assume that they got mad at you for making them listen to a QRP signal. There are many reasons why they could have "lost" you with none of them having anything to do with their like or dislike of QRP.

If you look at the spec's on the rigs that most people are using on the air, it's hard to find a really poor RX. Some are certainly better than others but during "normal" operating you are hard pressed to notice much difference. When you add the QRM from a major contest or when trying to hear a weak CW station between a few SSB signals some of those little differences begin to become apparent. But these conditions are really the exceptions rather than the rule for most of our QSO's.

Does anyone have 100% luck when calling CQ? Well, just go around and listen to people calling CQ and see just how many wind up not being called. Calling CQ with any amount of power is always a bit like fishing..... the water might be full of fish but you don't always find one that wants to eat what you are offering!

And I fully agree that a lot of people look for a loud station calling CQ. But add to that a few other things they are looking for too..... sending at a speed they want to chat at, sending style that they feel comfortable with and etc. Just how you call CQ can also have an affect on getting a response. As an example, if I hear someone calling CQ by sending a LONG string of CQ's I just continue tuning around to find someone who calls short CQ's. Then I will generally just send a few dits to see if they are working QSK. If they stop sending then I send my call and away we go. Believe it or not but there are still some people who don't use QSK! (Wheeeeeeee, that's going to generate a few replies!) There are times when I feel like chatting with someone who is using a bug. If I don't keep up my receiving skills they will leave me and believe me when I say that it takes more skill to copy poor sending than it does to copy good sending! Heck, I even remember the OT's saying that anyone could copy machine sent code, meaning those old paper tape machines, but that it took a good operator to copy hand sent code. And one thing I almost always avoid is someone using a hand key. I am one who doesn't like to either send with one or try to copy someone who is sending with one for more than a very short time! Oh boy, I'll bet that also brings out a few posts!

Hey, CW, QRP and ham radio enjoyment overall is a very personal thing so don't think that I am trying to say that others should not enjoy hand keys and other things that I don't. Just get on the air and have fun!

OK, this is getting a bit long and I didn't intend for it to do that. But the bottom line is that before you blame QRP for being the reason for the other station leaving, be sure that's really the case.

Now here's something to think about..... Just what is an enjoyable QSO?

OK, back in my hole.....

Ron, KU7Y  
ku7y@qsl.net  
Full Time RVing somewhere in the West  
Currently in Brenda, AZ.

-----  
Date: Thu, 10 Jan 2002 22:46:58 -0700  
From: Ron KU7Y <mswmod@bigplanet.com>  
To: QRP-L <qrp-l@Lehigh.EDU>  
Cc: W5YR <w5yr@att.net>  
Subject: [117427] Conjugate Matching  
Message-ID: <000501c19ac7\$770266a0\$d5c0a9d8@oemcomputer>  
MIME-version: 1.0  
Content-type: text/plain; charset=iso-8859-1  
Content-transfer-encoding: 7bit

Hi All,

OK, here's another question that has been bothering me lately.....

Years ago while working in a 2 way radio shop in Oregon I remember that a company called Larson sold good antennas. The owner, Larson, was a ham and published a little news letter that he sent to all the shops that bought his products and just about anyone else who wanted one. It was there that I saw the following idea and have seen it several times since.

But..... is it right? And is that really what is meant by the term Conjugate Match?

Remember now folks, I'm trying to paint a little picture of what my mind thinks is going on. Please read this with that in mind.

Lets say you have a black box that puts out 100 watts of RF at 7 MHz. You have a dipole and are feeding it with 50 ohm coax. You also have a very good antenna tuner between the black box RF generator and the feedline. Lets also give the antenna a feed point impedance of something like 300 ohms.

One last thing to assume for the time being.... NO LOSS. We'll add that in later.

The first cycle of power puts 100 watts of power down the feed line. When it gets to the antenna lets say that there is 10 watts that gets reflected back because of the mismatch (remember it's a 50 ohm feedline connected to a 300 ohm antenna). This leaves 90 watts to go "out" the antenna.

I realize that these numbers may not "add up" and that there would really be more or less power to be reflected with this antenna/feed line combination but for now lets just keep this 10 to 1 ratio.

That 10w comes back to the antenna tuner. Now the second cycle of RF arrives from the black box generator. The 100w from the generator and the 10w that just got reflected back now head out the feedline going to the antenna. Once again there is 10w reflected back. This leaves 100w to go "out" the antenna.

So starting with the second cycle we are still getting 100w "out" the antenna. The fact that there is also 10w bouncing back and forth along the feed line doesn't much matter.

The point that was being made was that SWR wasn't something to get too excited about nor was some reflected power. In the end most of it would wind up going "out" the antenna anyway.

In the real world you must also look at the losses you will have and the possibility of damage to parts in some cases.

My questions are:

Is the above model right?

In a typical (now there's a good term!) situation with 10 to 1 ratio of power to reflected power what kind of losses will there be, in watts, not dBs? (The reason I ask for it in watts is that for most of us it's easier to understand the whole relationship if we keep everything in one unit.)

What would the reflected power really be in the about 300 ohm antenna fed with 50 ohm coax. Use whatever value of reactance that might be found in a real antenna.

There was a good bit of work done on antenna tuners by Bob Kellog awhile back. Maybe some numbers from one of the more popular units could be used in the example.

Ah..... I think this is a good question that many of us can learn something from.

Thanks in advance to all those who chose to answer. Remember please to keep it simple for those of us who don't have a good understanding of math.

OK, back in my hole..... for awhile anyway!

Ron, KU7Y  
ku7y@qsl.net  
Full Time RVing somewhere in the West  
Currently in Brenda, AZ.

-----  
Date: Fri, 11 Jan 2002 10:23:28 -0800  
From: "Dave Fifield" <dave@redhotradio.com>  
To: <msswmod@bigplanet.com>,  
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [117428] Re: Conjugate Matching  
Message-ID: <000b01c19acd\$111422b0\$0500a8c0@AD6A>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

That model doesn't work for me Ron.

Let's take it to its extreme. Let's say that the match is very poor indeed and only 10W of the power gets out of the antenna on the first cycle. That leaves us with 90W bouncing back and forth between the TX and the antenna. According to the model, it doesn't matter, because the other 90W will make it out of the antenna eventually so I shouldn't be concerned about my bad match.

As Click and Clack would say....."Bo-o-o-gus!"

Match affects the amount of power delivered to the load (antenna in this case). A poor match results in power being lost in the system, i.e. that power does NOT get dissipated in the load, it ends up as wasted heat somewhere else. It's really as simple as that. Good match = more power delivered to the load = better signals on the air.

Cheers es 72,  
Dave Fifield, AD6A

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Date: Fri, 11 Jan 2002 12:43:27 -0600  
From: Mike <mmorrow@companet.net>  
To: qrp-1@Lehigh.EDU  
Subject: [117429] Re: Differences DSW & DSW+  
Message-ID: <3C3F324F.5EC0@companet.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Trevor Jacobs wrote:

> ... The DSW contains a microcontroller (PIC)  
> that controls the DDS (Direct Digital Synthesizer - basically a digital  
> frequency source/digital VFO) and also gives you the added benefit of a  
> built in keyer and CW frequency annunciator. The DSW also includes RIT  
> and tunes a much wider range of frequencies.

The DSW has crystal-like stability, even under large changes in ambient temperature, and frequency tunable in 50 or 200 Hz increments. Since there is no transmit mixer and bandpass filter to align, the DSW required less than eight hours to build, only four toroids to wind, and less than five minutes to fully align (peak the receiver input coil and adjust the CW offset). From that standpoint, the DSW is far far easier to align than the SW+ or MFJ Cub types of monoband rigs.

The DSW is a truly amazing and wonderful design, and one that showed that darned good results could be had by generating the RF directly with a DDS circuit, without the complexity of a PLL coupled to a DDS.

> The DSW is one of my favorite rigs.

There are a lot of members in that club! It's very unfortunate that the DSW was only available for about a year. I regret that I was only able to buy and build three of the four models (DSW-20, -30, -40) before they were discontinued due to problems with parts availability and prices, especially, IIRC, the AD9835 DDS chip.

One hopes that Dave Benson/K1SWL has something similar developing. I'm hoping for a new generation DSW with the common components all surface mount and pre-assembled, just like the MFJ Cub uses. There isn't much mental stimulation from hours of stuffing resistors and capacitors on a kit circuit board. Plus a mode A iambic keying option would make it perfect (and a 17-meter model would be great)!

Mike / KK5F

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Date: Fri, 11 Jan 2002 14:07:47 -0500  
From: Bruce Muscolino <w6toy@erols.com>  
To: qrp-l@lehigh.edu  
Subject: [117430] Filter Solutions  
Message-ID: <3C3F3803.9497ECC9@erols.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Yesterday's mail brought my copy of RF Design (yes, I occasionally read!). My eyes were attracted to an advertisement for some new filter design software. Today I went to the company's web site to investigate. The software is available in several different varieties and looks good. Free trial software is available for 20 days. The company is "NUHERTZ TECHNOLOGIES"; their website is <www.filter-solutions.com>. I know some of you are interested in filter design or exploration. You might want to look there!

73

-----  
Date: Fri, 11 Jan 2002 11:33:56 -0800  
From: Jerry Parker <jparker@fix.net>  
To: qrp-l@LeHigh.edu  
Subject: [117431] QRPp Subscription Status  
Message-ID: <2.2.32.20020111193356.006be488@fix.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Hey guys, we have just put the entire list of subscribers to NorCal's QRPp up on the Web page. Now you can go to the NorCal page and check your subscription status. We will be updating the page quarterly, and the latest revision will be dated so you can keep track of that subscription. Plus, we have a special deal for the first 100 that have expired and missed the fall 2001 issue, you know the one with all of the great one page articles. If you did not receive the Fall 2001 issue and are among the first 100 to renew, you can start your renewal with the Fall 2001 issue. All that you have to do is send a note with your renewal to Jim asking to start the sub with the fall 2001 issue.

All of the subscription info is on the web page at:

<http://www.fix.net/~jparker/norcal/substat/substat.htm>

Note: If you have a problem, say we list you as expired and you have paid, contact Paul Maciel at [ak1p@earthlink.com](mailto:ak1p@earthlink.com)



Paul is the guy who keeps the NorCal database records.

72, Jerry Parker, WA6OWR, NorCal Webmeister

-----  
Date: Fri, 11 Jan 2002 13:36:09 -0600  
From: Mike <mmorrow@companet.net>  
To: rwdittrich@hotmail.com  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [117432] Re: Antenna info  
Message-ID: <3C3F3EA9.51AD@companet.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Bill Dittrich wrote:

> A friend of mine is considering becoming a ham but he has a BIG problem. He  
> can put up a 20m dipole BUT he can only get it 5 or 6 feet off the ground.  
> If anyone has ever had any experience with a dipole so low to the ground

I use the arrangement you describe ALL the time when I'm camping. I install a multi-band dipole about eight feet high at the center insulator, and about six feet high at the ends. It has insulators along its length with integral wire jumpers that I can connect or disconnect to resonate on all HF ham bands from 40m to 10m. By keeping the antenna low, I can reach up and quickly make the appropriate changes anytime I want to change bands.

I used it to work 40 countries from Japan to Australia to Argentina to South Africa to Finland and Russia one weekend alone on 20/15/10 meters. I guess the theory books says it shouldn't work well for DX, but for ten years I've had great success with this low dipole. It even does a pretty good job on 40 meters.

I've tried portable vertical antennas, some that were commercial and dam\*\*d expensive, in the same application and had terrible terrible results, even though the theory books say they should have worked better.

I for one would not be put off recommending a low dipole on 20 meters if that is all that can be installed. Dipoles are dirt cheap to make, and while they may be a far cry from some DXer's dream beam atop a 190 foot tower, I think your friend would still find them servicable. If your friend's dipole is that low, he could at least think about installing some insulator/jumper assemblies as I described so that he could go out

and make it a dipole for any band 20m to 10m.

Mike / KK5F

-----  
Date: Fri, 11 Jan 2002 14:12:39 -0600  
From: "Harvey Mitchell" <hmitchell13@houston.rr.com>  
To: <qrp-1@Lehigh.EDU>  
Subject: [117433] PSK on IBM Thinkpad Laptop?  
Message-ID: <001201c19adc\$51c608a0\$6401a8c0@houston.rr.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Greetings. I am trying to set up an IBM ThinkPad laptop for PSK. When I start Digipan, I get an error message that "sound card is already in use or does not exist". Am I out of luck or is there some internal settings that I can manipulate? The computer uses WIN 2K professional as the operating system.

Thanks & 73,

Harv, K5YU  
Seabrook, TX

-----  
Date: Fri, 11 Jan 2002 13:02:42 -0700  
From: Niel Skousen <skousen@srv.net>  
To: qrp-1@lehigh.edu, tokyo-hy-power@mailman.qth.net  
Subject: [117434] FS: Tokyo HiPower HT-750  
Message-ID: <4.3.2.7.1.20020111125931.00b3ebb0@snake.srv.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

I have a THP HT-750 2w cw/ssb HT forsale.  
Covers 7/21/50MHz. Good condition, includes  
three whip ant's, no leather case or spkr-mic

\$550 shipped conus

Niel

-----

Date: Fri, 11 Jan 2002 15:30:49 -0800  
From: "w2wurjj" <w2wurjj@verizon.net>  
To: <mmorrow@companet.net>,  
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [117435] Re: Antenna info  
Message-ID: <001d01c19af8\$17ffede0\$71c2fea9@w2wu>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

What power is he going to run? Will he comply with radiation safety guidelines or have TVI? My thought is use any antenna to get on the air, providing it complies with the R&R & worry about DX later. This is a hobby so have fun doing it. <W2WU>

----- Original Message -----

From: Mike <mmorrow@companet.net>  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Sent: Friday, January 11, 2002 11:36  
Subject: Re: Antenna info

> Bill Dittrich wrote:

>

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> > can put up a 20m dipole BUT he can only get it 5 or 6 feet off the ground.

> > If anyone has ever had any experience with a dipole so low to the ground

>

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> want to change bands.

>

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> some insulator/jumper assemblies as I described so that he could go out  
> and make it a dipole for any band 20m to 10m.  
>  
> Mike / KK5F  
>

-----  
Date: Mon, 11 Feb 2002 16:22:46 -0500  
From: John Harper AE5X <ae5x@qsl.net>  
To: QRP-L <qrp-l@lehigh.edu>  
Subject: [117436] Viva el K1 con cuatro bandas! (Or, I really like my K1 with 4  
bands)  
Message-ID: <000501c1b342\$42571020\$64e85043@johnharp>  
MIME-version: 1.0  
Content-type: text/plain; charset=iso-8859-1  
Content-transfer-encoding: 7BIT

I finally stopped procrastinating and built, installed and aligned the 4-band module for my K1 today. I went with 15m for the upper band choice due to more activity on that band. The alignment was simpler than I thought it would be and the rig performed as expected right from the get-go. I did the alignment at work due to all the fancy Hewlett-Packard stuff laying around and then couldn't wait to get home to put her on the air.

I went in band order starting with 40m. Ed W3DWI (PA) and I exchanged 599 reports with him telling me I had a good tone with no drift in freq. Then I went to 30, called CQ and was answered by Ray G3RGD in Birmingham. Got a 569 from Ray who was 589 here with his FT1000 and 400w amp. On 20m Art K8CIT gave me a 579 from Michigan. Art was also QRP with a Ten Tec Pegasus and was 579 at my QTH also. I signed off with Art, telling him I needed to QSY to 15m to check out the last band, and Mac AD4PS (who had been monitoring) jumped in and told me he'd follow me up to 21.060 and listen for me. Making contact with Mac in Tampa on 15m was no problem. He was also QRP with a K2 and we exchanged 579 reports.

Man, I like this rig - still can't believe all the stuff that's in such a small package: 4 band transceiver, keyer, batteries, voltmeter and auto-tuner. Amazes me. I think some of these other rigs around the shack

here are gonna start gathering some dust! I plan on taking a short backpacking trip next month in Oklahoma's Black Kettle Grasslands and will be bringing my K1 along with me. I'll post details on my web site as the date nears, but for now it looks like the last weekend in February. There are no trees at this location so my main project now is coming up with a treeless antenna that I can easily carry with me. Any suggestions? Gonna go do some web-research on the St. Louis vertical.....

73 and see you on the air,

John Harper AE5X

Outdoor QRP & Lowband DXing: <http://www.qsl.net/ae5x>

-----  
Date: Fri, 11 Jan 2002 15:23:58 -0600  
From: "George, W5YR" <w5yr@att.net>  
To: hmitchell3@houston.rr.com  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [117437] Re: PSK on IBM Thinkpad Laptop?  
Message-ID: <3C3F57EE.E33D9C20@att.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Check that your modem or some other device isn't by default tying up the soundcard. Go to System/Device Manager and look things over. Also the MultiMedia section of Control Panel.

Some unfriendly programs when booted and running in the background automatically grab the soundcard in anticipation of being used later.

72/73/oo, George W5YR - the Yellow Rose of Texas  
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe  
Amateur Radio W5YR, in the 56th year and it just keeps getting better!  
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771  
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All outgoing email virus-checked by Norton Anti-Virus 2002

Harvey Mitchell wrote:

>

> Greetings. I am trying to set up an IBM ThinkPad laptop for PSK. When I  
> start Digipan, I get an error message that "sound card is already in use or

> does not exist". Am I out of luck or is there some internal settings that I  
> can manipulate? The computer uses WIN 2K professional as the operating  
> system.

-----  
Date: Fri, 11 Jan 2002 13:23:08 -0700 (MST)  
From: cherry@getnet.net  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [117438] Re: Conjugate Matching  
Message-ID: <1010780588.3c3f49ac0c522@mail.getnet.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 8bit

Matching is relative to the source. Some circuits adapt better to different loads. Class C, D, and E circuits have to have a relatively high Q circuit to work correctly, so they can accept a wide range of loads and still put out power. You just need to worry about the maximum voltage that can occur when not matched at the designed load. The actual output impedance of some solid state linears is not 50 Ohms but a much lower impedance. If the mismatch is too low in impedance the current may get too high. If the mismatch is too high in impedance the voltage may get too high. Most power amplifiers are very non-linear. Tubes and FET's are easier to model since they do not have stored charge and saturation problems. Good amplifiers have ALC and negative feedback and these affect the model of the output impedance.

Does this information help?

Jim W7ANF

Quoting Ron KU7Y <mswmod@bigplanet.com>:

> Hi All,  
>  
> OK, here's another question that has been bothering me lately.....  
>  
> Years ago while working in a 2 way radio shop in Oregon I remember that  
> a  
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> antenna.  
>  
> There was a good bit of work done on antenna tuners by Bob Kellog awhile  
> back.  
> Maybe some numbers from one of the more popular units could be used in  
> the  
> example.  
>  
> Ah..... I think this is a good question that many of us can learn  
> something  
> from.  
>  
> Thanks in advance to all those who chose to answer. Remember please to  
> keep it  
> simple for those of us who don't have a good understanding of math.  
>  
> OK, back in my hole..... for awhile anyway!  
>  
> Ron, KU7Y  
> ku7y@qsl.net  
> Full Time RVing somewhere in the West  
> Currently in Brenda, AZ.



>  
>

-----  
Date: Fri, 11 Jan 2002 14:40:34 -0700 (MST)  
From: "Karl F. Larsen" <k5di@zianet.com>  
To: Harvey Mitchell <hmitchell13@houston.rr.com>  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [117439] Re: PSK on IBM Thinkpad Laptop?  
Message-ID: <Pine.LNX.4.33.0201111438250.3113-100000@Daisy.dog>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

I have a IBM Thinkpad Laptop and have Digipan on it and it works just fine. Been using it for 2 years. You can't get a thinkpad without a sound card so you must be doing something wrong.

On Fri, 11 Jan 2002, Harvey Mitchell wrote:

> Greetings. I am trying to set up an IBM ThinkPad laptop for PSK. When I  
> start Digipan, I get an error message that "sound card is already in use or  
> does not exist". Am I out of luck or is there some internal settings that I  
> can manipulate? The computer uses WIN 2K professional as the operating  
> system.

>  
> Thanks & 73,  
>  
> Harv, K5YU  
> Seabrook, TX  
>  
>

--  
Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -  
<http://www.zianet.com/k5di/>

-----  
Date: Fri, 11 Jan 2002 14:45:40 -0700 (MST)  
From: "Karl F. Larsen" <k5di@zianet.com>  
To: Jerry Parker <jparker@fix.net>  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [117440] Re: QRPp Subscription Status

Message-ID: <Pine.LNX.4.33.0201111441230.3113-1000000@Daisy.dog>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

I am one who dropped my subscription. In simple terms we are in a depression and I lost a lot of money in the stock market crash, about 20% of my total for retirement.

When the market perks up and the unemployment drops below 6% and I begin to make money with my money THEN I will re-subscribe.

On Fri, 11 Jan 2002, Jerry Parker wrote:

> Hey guys, we have just put the entire list of subscribers to NorCal's QRPP  
> up on the Web page. Now you can go to the NorCal page and check your  
> subscription status. We will be updating the page quarterly, and the latest  
>  
> All of the subscription info is on the web page at:  
>  
> <http://www.fix.net/~jparkernorcal/substat/substat.htm>  
--

Yours Truly,

- Karl F. Larsen, [k5di@arrl.net](mailto:k5di@arrl.net) (505) 524-3303 -  
<http://www.zianet.com/k5di/>

-----  
Date: Fri, 11 Jan 2002 14:53:11 -0700 (MST)  
From: "Karl F. Larsen" <[k5di@zianet.com](mailto:k5di@zianet.com)>  
To: Dave Fifield <[dave@redhotradio.com](mailto:dave@redhotradio.com)>  
Cc: Low Power Amateur Radio Discussion <[qrp-l@Lehigh.EDU](mailto:qrp-l@Lehigh.EDU)>  
Subject: [117441] Re: Conjugate Matching  
Message-ID: <Pine.LNX.4.33.0201111446480.3113-1000000@Daisy.dog>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Dave, what happens is that 90% passes through all the resistance elements more than 1 time. If it's 10 times then the power lost to  $e$  (squared)/ $r$  is about 10 times that lost if it is a good match.

If you use a tuner to obtain a better match, be careful you don't give the tuner a very low impedance because then tuner losses go up.

On Fri, 11 Jan 2002, Dave Fifield wrote:

> That model doesn't work for me Ron.  
>  
> Let's take it to its extreme. Let's say that the match is  
> very poor indeed and only 10W of the power gets  
> out of the antenna on the first cycle. That leaves us  
> with 90W bouncing back and forth between the TX  
> and the antenna. According to the model, it doesn't  
> matter, because the other 90W will make it out of the  
> antenna eventually so I shouldn't be concerned about  
> my bad match.  
>  
> As Click and Clack would say....."Bo-o-o-gus!"  
>  
> Match affects the amount of power delivered to the  
> load (antenna in this case). A poor match results in  
> power being lost in the system, i.e. that power does  
> NOT get dissipated in the load, it ends up as wasted  
> heat somewhere else. It's really as simple as that.  
> Good match = more power delivered to the load =  
> better signals on the air.  
>  
> Cheers es 72,  
> Dave Fifield, AD6A  
>  
>

--  
Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -  
<http://www.zianet.com/k5di/>

-----  
Date: Fri, 11 Jan 2002 17:08:36 -0500  
From: "John L. Sielke" <jsielke@pobox.com>  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [117442] Re: QRPp Subscription Status  
Message-ID: <02011117083608.02175@CC2289974-A>  
Content-Type: text/plain;  
charset="iso-8859-1"  
MIME-Version: 1.0  
Content-Transfer-Encoding: 8bit

On Friday 11 January 2002 16:45, Karl F. Larsen wrote:  
> I am one who dropped my subscription. In simple terms we are in a

> depression and I lost a lot of money in the stock market crash, about 20%  
> of my total for retirement.

Not being a PHd, I wasn't smart enough to invest in the Stock Market, so  
stuck to stuff like Tax free municipals, treasury notes, and CDs. Retired 2  
years ago at age 55.

Boy am I glad I was too dumb to invest in the Stock market!

-----  
John L Sielke W2AGN  
w2agn@pobox.com  
<http://www.qsl.net/w2agn>  
Trustee: W3IYQ  
-----

Date: Fri, 11 Jan 2002 17:08:41 EST  
From: Drbob92031@aol.com  
To: qrp-l@lehigh.edu  
Subject: [117443] Re: Identifying Oneself as QRP  
Message-ID: <133.79389da.2970bc69@aol.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="US-ASCII"  
Content-Transfer-Encoding: 7bit

Hi Ron;  
What is wrong with a hand key. I (and most guys/gals) can send faster than  
they can receive. If I use my keyer, (yes, I have one) I will tend to send  
faster than I can receive. Then I am in trouble. With the hand key, the  
responding op to my CQ knows what is a good speed for me and if considerate  
will QRS if need be.  
72/73 de WA2EAW, Bob  
-----

Date: Fri, 11 Jan 2002 15:17:36 -0700 (MST)  
From: "Karl F. Larsen" <k5di@zianet.com>  
To: Roger Traylor <traylor@ece.orst.edu>  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [117444] Re: Square wave drive in DBM's (was New ADE mixers/tutorial)  
Message-ID: <Pine.LNX.4.33.0201111507200.3113-100000@Daisy.dog>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

It appears that everyone in this discussion has never built a mixer. A mixer will input  $f_1$  and  $f_2$  in the usual case. It will output  $f_1$ ,  $f_2$ ,  $f_1 - f_2$ ,  $f_2 + f_1$ ,  $2f_1$ ,  $2f_2$ ,  $2f_1 - 2f_2$ , ... and on and on and on. So every mixer has transformers tuned to the mixer product desired and these transformers give very high VSWR to unwanted mixer products.

Now what is a mixer? It's any non-linear device. Diodes are simple non-linear devices. You can use multiple diodes or transistors or tubes to achieve a stronger desired mixer product.

We put mixers into cans that keep the unwanted stuff from getting out.

On Fri, 11 Jan 2002, Roger Traylor wrote:

> John,  
> I firmly believe so. I have connected a sine wave source to the LO port  
> and looked at the LO port with a scope. The waveform is a very clipped  
> sine wave, and pretty much looks like a square wave. So yep, even with  
> sine wave drive you get harmonics. I think that the big sine waves are  
> used to make the edges(transitions) look like square waves.

--

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -  
<http://www.zianet.com/k5di/>

-----  
Date: Fri, 11 Jan 2002 17:32:03 -0500  
From: "Bill Dittrich" <rwdittrich@hotmail.com>  
To: qrp-l@Lehigh.EDU  
Subject: [117445] Re: PSK on IBM Thinkpad Laptop?  
Message-ID: <LAW2-F42wiZ9rWjAKYV0001f6c8@hotmail.com>  
Mime-Version: 1.0  
Content-Type: text/plain; format=flowed

don't ask why (who knows?) but I got the exact same error when running another style of program but when I shutdown my anti-virus software (Norton System Works, always running in background), the problem went away. If you have some anti-virus program, you might try suspending it, see if it goes away.

73

Bill

>From: "Harvey Mitchell" <hmitchell13@houston.rr.com>  
>Reply-To: hmitchell13@houston.rr.com  
>To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
>Subject: PSK on IBM Thinkpad Laptop?  
>Date: Fri, 11 Jan 2002 14:12:39 -0600  
>  
>Greetings. I am trying to set up an IBM ThinkPad laptop for PSK. When I  
>start Digipan, I get an error message that "sound card is already in use or  
>does not exist". Am I out of luck or is there some internal settings that  
>I  
>can manipulate? The computer uses WIN 2K professional as the operating  
>system.  
>  
>Thanks & 73,  
>  
>Harv, K5YU  
>Seabrook, TX  
>

---

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<http://www.hotmail.com>

---

Date: Fri, 11 Jan 2002 12:20:19 -1000  
From: w6ors@juno.com  
To: qrp-l@lehigh.edu  
Subject: [117446] Wanted  
Message-ID: <20020111.125943.-845779.2.w6ors@juno.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

01-11-02

Does anyone out there have a DX-77T that they would like to dispose of?  
If so, please reply off list to: w6ors@juno.com  
72/72,  
Corky W6ORS  
I've decided I'm living forever...so far so good!

---

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-----  
Date: Fri, 11 Jan 2002 18:23:39 -0500  
From: "N3BJ" <alanfryer@email.msn.com>  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [117447] WTB: DSW20/30/80  
Message-ID: <001a01c19af7\$029b0d00\$5243103f@hppav>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Please let me know if you have on that is surplus to your needs. Problem  
rigs OK, no case OK.

Alan, N3BJ  
Bent Mountain, VA

-----  
Date: Fri, 11 Jan 2002 18:53:58 -0500  
From: kb1dxc <kb1dxc@discovernet.net>  
To: qrp-l@Lehigh.EDU  
Cc: casey.jay@gte.net  
Subject: [117448] Re: SW+20 question  
Message-ID: <a05100302b86529206a45@[216.221.130.96]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii" ; format="flowed"

Hello Donn,

I wish I could tell you exactly what value variable I used  
but I cannot. It was something that I bought at a hamfest before I  
was even licensed, in fact that is where I passed my first test. I  
would guess that it is one of those 350 pf variables that are so  
abundant. I would guess that the smaller value that you can find the  
better off you will be. According to the directions you can use  
anywheres from 0 to 150 pf cap. If you can find an old variable in a  
discarded am radio it would probably work fine. I just soldered in a  
couple of wires where C7 is supposed to go and then soldered the  
wires to the cap.

Just so you know, I did try something else first but had difficulty with it. I took apart an IC socket and put 2 of the little clips on the board so I could switch the C7 caps, but it was just a shoddy way of doing it. I suppose if you could find the right kind of socket for changing caps that it would be a good idea. There is a web page about UN-MODULES for the K2. I think something like the sockets they use for those would be good but I did not have access to them at the time.

Anyways, there is much room for experimenting here and you can have some fun while doing it. I wish you lotsa luck.

73,  
Mike  
KB1DXC

>Mike,  
>Read with interest your comment about the air variable cap. What  
>size and where  
>did you get it? How large is it and how did you install it on the  
>board? I too  
>am building the SW20. This QRP kit building is all new to me. Last  
>item I built  
>was a Heathkit back in the 70's.  
>72, Donn, WB4ZWT  
>66 and still learning  
>  
>kb1dxc wrote:  
>  
>> Tom,  
>>  
>> I also have an SW +20 and I could not get a capacitor that  
>> put me where I wanted to be. I did the next most logical thing that I  
>> could think of. I had an old air variable cap and I replace the cap,  
>> I think I recall it to be C7, and with the air variable. Guess what,  
>> I can tune up and down most of the band now. What I did was find  
>> where the air variable would put my top frequency at 14.062, this  
>> gave me the QRP calling frequency and down for most of the CW portion  
>> of the band. You do have to be careful when you have the air variable  
>> in there because it would allow you to transmit out of band.  
>>  
>> Good Luck,  
>> Mike,  
>> KB1DXC  
>>  
>> >I recently got my SW+20 on the air.  
>> >  
>> >All and all, it seems like a good rig, fun to build.



>> >  
>> >However, I seem to only have about 36kHz of "bandspread", and I  
>>can only use  
>> >about 25 kHz of that because of my license. I get about 14.013MHz to  
>> >14.050MHz. I am putting out about 1.75w to my HMBRU vertical antenna.  
>> >  
>> >What can I do to increase my effective range? Can I somehow change it so I  
>> >can get, say, 14.025 to 14.060MHz or so? Am I asking too much?  
>> >Curious,  
>> >Tom  
>> >KC0GXX

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End of QRP-L Digest 2433

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